REMARKS

Status of case

Claims 1-12 are currently pending in this case. Claims 1, 4, 9, and 10 are independent claims.

Objection

Claim 12 is objected to because it does not end with a period. Applicant amends the claim to overcome the objection.

Claim Rejections under 35 USC §102

Claims 1-12 are rejected under 35 U.S.C. §102(a) as being anticipated by PCT No. WO 02/29427 (Nguyen).

Claims 1, 4, and 10

Claim 1 recites:

"a resource managing unit for managing statuses of node resources in a network and statuses of link resources in said network",

"an adaptive control determining unit for determining whether or not it is necessary to transmit either or both of said instruction of relocation to said node function location controlling unit and said instruction of restructuring to said path structure controlling unit on the basis of said statuses of node resources and said statuses of link resources which are managed by said resource managing unit"

"a node function controlling unit" that "relocat[es] functions of functional nodes and data used for the functions in said network into an optimum condition . . . in response to an instruction of relocation", and

"a path structure controlling unit" that "restructur[es] a structure of paths in said network into an optimum condition . . . in response to an instruction of restructuring".

See also claims 4 and 10. Thus, claim 1 recites: a resource managing unit that manages the status of both the node resources and the link resources in the network; an adaptive control determining unit that determines whether to send a relocation instruction (to relocate a node function) or a restructuring instruction (to restructure a path); a node function controlling unit responsive to the

relocation instruction to relocate a node function; and a path structure controlling unit responsive to the restructuring instruction to restructure the path of the network.

As shown above, the claims as currently presented recite a specific type of management of the node functions and link resources. Specifically, the statuses of both the node resources and the link resources in the network are managed (via the resource managing unit), and based on the statuses, instructions are made whether it is necessary to relocate node functions or to restructure path structures (via the adaptive control determining unit). The instructions are then executed to relocate functions (via the node function location controlling unit) or to restructure paths (via the path structure controlling unit). Through this specific type of management of the node resources and link resources, certain network problems that affect the quantities of data to be processed/communicated may be addressed, such a mobile terminal moving into a communication network, node congestion, addition of a new service, or a node failure. See paragraph [0011].

The cited art fails to teach or suggest analyzing the status of both node functions and link resources in a network, and relocating/restructuring of the node functions/link resources based on the analyzed status. For example, the Nguyen reference fails to teach or even suggest several limitations in claim 1, including the "node function controlling unit" and the "adaptive control determining unit".

With regard to the lack of any teaching relocating of the node functions, the Nguyen reference teaches the following:

> the present invention converts business profiles and objectives into network constraints, optimizes the traffic routing based on these constraints to balance the load over the entire network. These functionalities provide solutions to many critical problems for the service providers. These problems include such issues as network design, network performance, network availability, network planning, traffic engineering, and maximizing business objectives using existing network resources.

Page 5, lines 2-10. Moreover, the Nguyen reference discloses a concrete definition of a node (as show on page 11, lines 9-11) and fails to disclose a unit with the capability of relocating function of functional nodes and data in a network. Thus, the Nguyen reference teaches that the solution to the various network problems is to "optimize the traffic routing . . . to balance the load over the entire network." Even if one were to argue that the Nguyen reference teaches analysis of node functions, the Nguyen reference does not teach or even suggest relocating the node functions to solve a node function problem; instead, the Nguyen reference teaches that any supposed problem in the node functions is solved by focusing on the traffic routing (restructuring the links).

Similarly, the Nguyen reference fails to teach or suggest the "adaptive control determining unit" as claimed. The Nguyen reference discloses analysis engine 230 (on page 21, line 14 – page 22, line 17); however, analysis engine 230 only retrieves data include network status data, user constraints and network constraints for formulating an optimized routing solution. Analysis engine 230, however, does not determine whether a relocation of node functions and/or restructuring of paths is necessary (as recited in the "adaptive control determining unit"). Therefore, claims 1, 4 and 10 are patentable over the cited art.

Claim 9

Claim 9 recites:

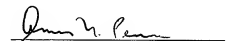
> a lock controlling unit for controlling a lock of a certain resource, when said certain resource is controlled by a certain network structure controlling device to achieve a relocation of functions of nodes and data used for the functions in said network or to achieve a restructuring of a structure of paths in said network, for avoiding said certain resource being controlled by said network structure controlling device, in response to a request for a lock control from said certain network structure controlling device

The Office Action states that the Nguyen reference teaches "lock controlling unit", citing page 26, lines 1-19. As is evident from the cited passage (and other sections of the Nguyen reference), the Nguyen reference fails to teach or suggest the capability of locking network resources as recited in claim 9. Rather, the Nguyen reference merely teaches that if "it is more efficient and produces less network impact on the network", than a resource is not used. See page 26, lines 12-15. This is considerably different from locking the network resource (regardless of the efficiency or network impact). Therefore, Applicants contend that claim 9 is patentable over the cited art.

SUMMARY

If any questions arise or issues remain, the Examiner is invited to contact the undersigned at the number listed below in order to expedite disposition of this application.

Respectfully submitted,



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